

# sunways

Sunways Single Phase AC-Coupled Inverter with Two MPPT  
STR-3~8KTL-HS

MAX 98.0% EFFICIENCY

IP65 PROTECTION



Max. efficiency up to 98.0%



With AC output ranging from 3kW to 8kW



Powerful load adaptability, support multiple loads stable access



Fast and easy data checking and commissioning via App or OLED display



Wide battery voltage range allows more battery modules connection and increases self consumption rate.



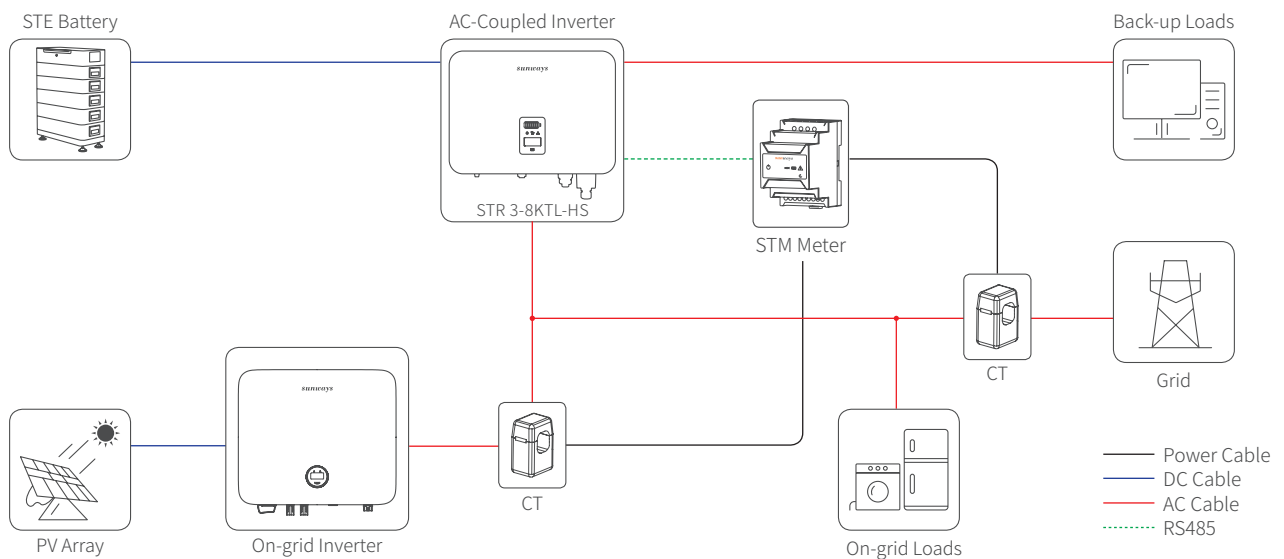
Fast charging/discharging of up to 30A to meet the demand of higher consumption and energy trading.



Compatible with most on-grid inverters in the market



Uninterruptible power supply, switch to off-grid mode within 10ms



Model		STR-3KTL-HS	STR-3.6KTL-HS	STR-4.2KTL-HS	STR-4.6KTL-HS	STR-5KTL-HS	STR-6KTL-HS	STR-7KTL-HS	STR-8KTL-HS
Battery	Battery Type	Lithium battery (with BMS)							
	Battery Communication Mode	CAN / RS485							
	Battery Voltage Range (V)	85-500	85-500	85-500	85-500	85-500	85-500	85-500	85-500
	Maximum Charging Current (A)	30	30	30	30	30	30	30	30
	Maximum Discharge Current (A)	30	30	30	30	30	30	30	30
	Rated Current Of Built-In Fuse (A)	63	63	63	63	63	63	63	63
Output (Grid)	Rated Output Power (W)	3,000	3,600	4,200	4,600	5,000/4,990 <sup>①</sup>	6,000	7,000	8,000
	Max. Output Power (W)	3,300	3,960	4,600	4,600	5,500/4,990 <sup>①</sup>	6,600	7,700	8,000
	Ac Output Rated Apparent Power (VA)	3,000	3,600	4,200	4,600	5,000/4,990 <sup>①</sup>	6,000	7,000	8,000
	Max. Apparent Power (VA)	3,300	3,960	4,600	4,600	5,500/4,990 <sup>①</sup>	6,600	7,700	8,000
	Max. Input Apparent Power (VA)	6,000 <sup>②</sup>	7,200 <sup>②</sup>	8,400 <sup>②</sup>	9,200 <sup>②</sup>	10,000 <sup>②</sup>	11,000 <sup>②</sup>	11,000 <sup>②</sup>	11,000 <sup>②</sup>
	Rated Output Voltage (V)	L/N/PE, 220/230/240							
	Rated Ac Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
	Ac Output Rated Current (A)	13	15.7	18.3	20	21.7	26.1	31.8	36.3
	Max. Output Current (A)	15	18	21	21	25/21.7 <sup>①</sup>	28.7	35	36.3
	Power Factor	0.8 leading ...0.8 lagging							
	Max. Total Harmonic Distortion	<3% @Rated Output Power							
	DCI	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In
	Output (Back-up)	Ups Switching Time	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms
Rated Output Voltage (V)		L/N/PE, 220/230/240							
Rated Ac Frequency (Hz)		50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Peak Output Apparent Power (VA)		6,000 <sup>③</sup> , 60s	7,200 <sup>③</sup> , 60s	8,400 <sup>③</sup> , 60s	9,200 <sup>③</sup> , 60s	10,000 <sup>③</sup> , 60s	10,000 <sup>③</sup> , 60s	10,000 <sup>③</sup> , 60s	10,000 <sup>③</sup> , 60s
Voltage Harmonic Distortion		<3% @Linear load							
Efficiency	Battery Charged By Pv Max. Efficiency	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%
	Battery Charged By Ac Max. Efficiency	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%
	Max Battery Discharge Conversion Efficiency	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%

Protection	
Battery input reverse connection protection	Integrated
Insulation Resistance Protection	Integrated
Surge Protection	Integrated
Over-temperature Protection	Integrated
Residual Current Protection	Integrated
Islanding protection	Frequency shift, Integrated
AC Over-voltage Protection	Integrated
Overload protection	Integrated
AC Short-circuit Protection	Integrated

General Data	
Over voltage category	Main: III
Dimensions (mm)	550W*410H*175D
Weight (KG)	23
Protection Degree	IP65
Self-consumption at Night (W)	<15
Topology	Transformerless
Operating Temperature Range (° C)	-30~60
Relative Humidity (%)	0~100
Operating Altitude (m)	3000
Cooling	Natural Convection
Noise Level (dB)	<25
Display	OLED & LED
Communication	WiFi/LAN (Optional)

Compliance
IEC62109、IEC62116、VDE4105、VDE0126、AS4777、RD1699、NBR16149、IEC61727、IEC60068、IEC61683、EN50549、EN61000

① The grid feed in power for AS/NZS 4777.2 is limited 4.99kW & 4.99kVA & 21.7A.

② Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery.

③ The output power will exceed the rated value only when the power in the PV array is sufficient, and the duration of the overload is relating to the overload power.